

success measured

FOUR
FOUNDATIONAL
ELEMENTS OF
STUDENT-LEVEL
GROWTH



introduction

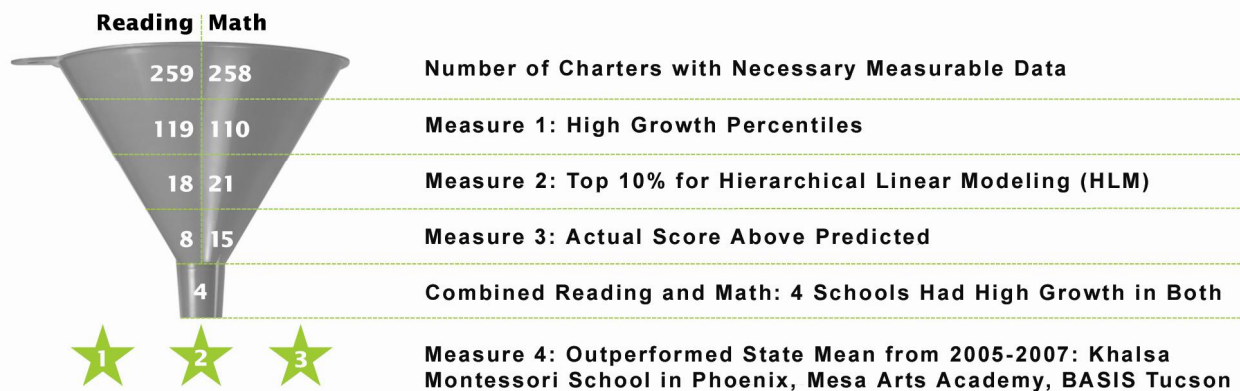
All Arizona educators want their students to get a quality education. *Success Measured*, a study conducted by the Arizona Charter Schools Association, offers some valuable answers on how to achieve that goal. The rigorous research identified four foundational elements of student-level growth that schools – charter or district – must have to help students perform better academically. They include a leader with a purpose; teachers who take responsibility for the end result; a culture that promotes teamwork; and using data to solve problems.

The bulk of the data for this study came from AIMS (Arizona Instrument to Measure Standards) reading and math scores for more than 700,000 students in all public schools. A statistical analysis of the data and a four-step filtering process were then used to identify the very best charter schools in the state. This method is unique because it creates a way to identify charter schools where students are achieving high levels of individual growth. It also deepens the use of quantitative and qualitative data to uncover findings that are a starting point to guide schools to higher student performance.

Success Measured used four filters to identify the best charter schools in Arizona. Two methods focused on student growth and two focused on systematic high achievement and sustainability. To make it through the four filters, schools had to meet all four of the following criteria:

- ◆ High student-level growth percentile ranks allowing us to ask the question, “Given a student’s starting point, how much did they grow over the last year?”
- ◆ Higher than expected student-level growth, given student demographics
- ◆ High actual-minus-predicted score
- ◆ Long-term evidence of school-level growth relative to the state mean

FIGURE 1: THE FILTERING PROCESS REVEALED THREE SCHOOLS



Once we identified the three best schools, we checked two additional items to ensure accuracy. First, we confirmed that the schools tested virtually all of their students and did not exclude groups of students who were expected to receive lower scores. Then, the schools’ financial records were reviewed to make sure that success was occurring in a fiscally sound environment. We also matched them to other schools with similar demographic characteristics to see the differences between the three top schools and those that had less successful track records.

As soon as we were confident that the data we used identified schools that were succeeding beyond just having high test scores, we were ready to take a closer look at each one. Three charter schools met the *Success Measured* study’s rigorous criteria in both reading and math: **BASIS Tucson**, **Mesa Arts Academy** and **Khalsa Montessori** in Phoenix. Interestingly, while the schools are all quite similar in their student results, they vary widely in their educational philosophies and daily routines.

“Each generation of Americans has outstripped its parents in education, in literacy, in economic attainment. For the first time in the history of our country, the educational skills of one generation will not surpass, will not equal, will not even approach, those of their parents. “

-PAUL COPPERMAN, AUTHOR OF *THE LITERACY HOAX*

finding growth: schools where students keep getting better

BASIS TUCSON—TUCSON

Founded in 1997, the express purpose of BASIS Tucson has been to provide students with a world-class education based on an American curriculum with a European model of rigor that demands a high degree of student accountability. Students at this top school are taught to ask for help. When a student gets stuck, he or she is expected to come to school an hour early to work with the teacher. Teachers have morning office hours to address any student questions, as well as afternoon office hours once a week.

The reason for this extra work is that all students at BASIS take Advanced Placement exams. While most high schools only offer these tests to their “best and brightest” students, the core of the BASIS philosophy is that all students can pass rigorous exams, if the teachers and students are willing to work for it.

TABLE 1: BASIS TUCSON AND COMPARISON SCHOOLS

Measure	BASIS Tucson	Comparison School 1	Comparison School 2	State Average
% White	61	83	86	54 ^a
% Hispanic	21	11	12	37 ^a
% FRPL	N/A	N/A	N/A	59 ^b
% ELL	3	0	0	9 ^c
Number of Students	136	181	243	485 ^a
Grades Served	6 to 12	K-12	4 to 12	N/A
Math HLM	10.2	-1.46	0.27	0
Math Median Growth Percentile	68	44.5	46.5	49
Math Quadrant	A	D	D	A ^d
Reading HLM	4.2	-2.6	-3	0
Reading Median Growth Percentile	61	40.5	38.5	49
Reading Quadrant	A	D	D	A ^d

a Median from October enrollment, 2007-08.

b Schools that report Free and Reduced Price Lunch.

c Median of school % ELL, AIMS data 2007.

d 37% of schools are in quadrant A for math, 38% for reading; 15% in quadrant B for math, 12% for reading, 16% in quadrant C for math and reading; 31% in quadrant D for math, 35% for reading.

TABLE 2: MESA ARTS ACADEMY AND COMPARISON SCHOOL

Measure	Mesa Arts Academy	Comparison School	State Average
% White	32	59	54 ^a
% Hispanic	63	36	37 ^a
% FRPL	81	65	59 ^b
% ELL	6	8	9 ^c
Number of Students	216	355	485 ^a
Grades Served	K-8	K-8	N/A
Math HLM	11.6	-5.5	0
Math Median Growth Percentile	56	35	49
Math Quadrant	A	D	A ^d
Reading HLM	9.9	-2.8	0
Reading Median Growth Percentile	64	42.5	49
Reading Quadrant	A	D	A ^d

a Median from October enrollment, 2007-08.

b Schools that report Free and Reduced Price Lunch.

c Median of school % ELL, AIMS data 2007.

d 37% of schools are in quadrant A for math, 38% for reading; 15% in quadrant B for math, 12% for reading, 16% in quadrant C for math and reading; 31% in quadrant D for math, 35% for reading.

MESA ARTS ACADEMY—MESA

Mesa Arts Academy began as a partnership between Mesa Public Schools and the Boys and Girls Club of Mesa. The charter school is purposely located in a predominately low-income, Latino neighborhood where police shut down a methamphetamine lab when the school first opened in 1995. More than 80 percent of the school's students are part of the Free and Reduced Price Lunch program – an indicator of poverty and traditionally thought of as a barrier to learning.

Understanding data has been a core component of Mesa Arts Academy's success. In 2001, the principal and a few teachers began a three-year Professional Development Leadership Academy, where they learned how to gather data, interpret it and make student-level instructional decisions based on their findings.

KHALSA MONTESSORI SCHOOL—PHOENIX

Initially a private school, Khalsa Montessori became a charter school in 1996. The Montessori teaching method emphasizes a multi-sensory learning environment. Students' intellectual, physical, and psychological abilities are nurtured through extensive use of hands-on activities, a non-traditional classroom environment and multi-age grouping.

At Khalsa, a culture of comfort and respect is fostered in an atmosphere where students and teachers remove their shoes, sit on floor cushions, as well as traditional desks and speak in quiet voices. Hands-on learning activities include using beads or puzzle-like grids to calculate math problems and working in the vegetable garden. Three “lower elementary” classrooms house six-to-nine-year-olds, while nine-to-twelve-year-old students are taught in two “upper elementary” classrooms. Though they are separated, both age groups follow a similar daily routine.

TABLE 3: KHALSA MONTESSORI SCHOOL – PHOENIX AND COMPARISON SCHOOLS

Measure	Khalsa Montessori	Comparison School 1	Comparison School 2	State Average
% White	63	78	92	54 ^a
% Hispanic	10	10	0	37 ^a
% FRPL	N/A	N/A	N/A	59 ^b
% ELL	0	0	0	9 ^c
Number of Students	163	138	115	485 ^a
Grades Served	K-6	K-8	K-8	N/A
Math HLM	11.8	0.89	-4.36	0
Math Median Growth Percentile	72	40.5	30.5	49
Math Quadrant	A	D	D	A ^d
Reading HLM	4.4	-1.49	0.14	0
Reading Median Growth Percentile	65.5	44	54	49
Reading Quadrant	A	C	A	A ^d

a Median from October enrollment, 2007-08.

b Schools that report Free and Reduced Price Lunch.

c Median of school % ELL, AIMS data 2007.

d 37% of schools are in quadrant A for math, 38% for reading; 15% in quadrant B for math, 12% for reading, 16% in quadrant C for math and reading; 31% in quadrant D for math, 35% for reading.

fostering growth: what every school needs to grow

Despite their differences in philosophy and specific approaches to addressing student needs, all three of the top schools practice four foundational elements that we believe are necessary for students to grow academically.

A LEADER WITH A PURPOSE

In our globally competitive schools, leadership, vision and mission are very powerful words that drive every single decision. The school leaders set the tone, modeling the attitude and behavior they want to see from every person – teachers, staff members, students and parents – in the school.

TEACHERS WHO TAKE RESPONSIBILITY FOR THE END RESULT

One of the most important jobs of a school leader is to hire the right teachers. While all three leaders value subject-matter expertise, it was a teacher's character that was most often the deciding factor for them. These teachers have an ability to demand more from their students and themselves, exhibit a love of learning and a willingness to be assessed.

A CULTURE THAT PROMOTES TEAMWORK

The leaders and teachers at these top schools get their strength to foster growth from being part of a bigger team. The teachers would not be as successful if they remained in their classrooms all day, isolated from their peers. Rather, they have defined processes to gather in a climate that promotes "getting the job done together."

A PROCESS FOR SOLVING PROBLEMS

Data is imperative for addressing student needs and finding solutions, and top schools solve their school and student-level problems in a systematic, data-driven method.

what we didn't learn

There is a lot of discussion in the education literature about parent involvement, state spending and class size. We examined those issues to see what we could learn from the globally competitive charter schools and came up with some interesting results. We did not find that parent involvement, state spending and class size made a significant difference in these globally competitive charter schools. At all three of the schools we studied in detail, we probed the question of parent involvement and got the same answer: Parents have to buy into the rigor of the school. We also didn't find that any of the top schools had any financial advantage over the comparison schools. Improving achievement seems to be a matter of resource allocation: Increased funding could be used wisely in top schools to achieve greater results, but increased spending itself doesn't guarantee success. Finally, class size did not seem to contribute significantly to student achievement.

next steps

For many schools, the type of cultural shift required to implement the four foundational elements of student-level growth may seem unattainable. School administrators and teachers need help seeing themselves as advocates for each child, especially those who have no other adult who understands their educational needs. *Success Measured* shows that it can be done in any type of school. It just starts with one person believing in students, observing areas for improvement and making changes. At the Association, we are using the results of *Success Measured* to implement a variety of hands-on technical assistance options and provide struggling schools with specific strategies to achieve success. By doing this, we hope to fulfill our mission of high student achievement through quality charter schools one student at a time.

To find out more, please visit www.azcharters.org or call the Arizona Charter Schools Association at 602.944.0644. The full report is available at www.azcharters.org/docs/successmeasured.pdf.



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